United States Department of Agriculture Forest Service Aviation Safety Alert

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Subject: Accepted procedures for the mixing and loading of retardant

into SEAT aircraft

Area of Concern: SEAT Aircraft Operations

Distribution: All Aviation and Fire Personnel

Discussion: There have been several recent aircraft incidents that involved the overloading of SEAT aircraft with liquid concentrate (LC) retardant as a result of mixing or loading procedures. These procedures included loading LC directly into aircraft from bulk storage tanks while utilizing various types of hardware devices that were intended to blend retardant being pumped directly from the bulk tanks to the aircraft. These hardware devices have included Canadian Y Blenders, "SEAT" Y Blenders, pre-calibration tanks and other locally fabricated hardware. However, serious overloading can occur when pure LC is loaded into an aircraft without being mixed with the appropriate ratio of water.

In an effort to eliminate the possibility of overloading an aircraft with an incorrect mix of retardant, the following procedures apply immediately:

Both powdered and liquid bulk materials will be blended in a mixing container prior to being introduced into the aircraft. In order to maintain quality control and safe flight operations, no bulk material will be loaded into an aircraft prior to being mixed to the proper ratio and checked by refractometer or other accepted method. The practice of loading an aircraft with bulk material and then adding water is not an acceptable method of mixing retardant.

All personnel engaged in the loading of retardant aboard SEAT aircraft must be knowledgeable of, and fully trained on, the use of retardant loading systems for SEAT aircraft.

This new procedure has been coordinated among DOI bureaus and the USDA/Forest Service.

/s/ Ron Hanks
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